EXHIBIT 11

INVESTIGATION

of the

Bryson Crash

RFI#22SC0121

Prepared by:

Christopher Roche

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THE EXPERTS
Robson Forensic

INVESTIGATION OF THE BRYSON CRASH

EXPERT'S REPORT **NOVEMBER 17, 2023**

A. INTRODUCTION

This two-vehicle crash occurred on 3/15/2020 at about 11:15pm on GA2 at the intersection with GA5 in Fannin County, Georgia. The collision involved:

- A 2008 Ford Escape driven by Santana Kelley with passengers Joshua Bryson and Cohen Bryson.
- A 2016 Ford F-250 Super Duty driven by Hunter Elliott.

As a result of the crash, the rear passenger of the Escape, Cohen Bryson, was fatally injured.

The purpose of this investigation was to determine whether Rough Country's actions or inactions related to the lift kit fitted to the Ford F-250 were improper and caused or contributed to the crash severity and the fatal injuries of Cohen Bryson.

B. ADDITIONAL MATERIALS AVAILABLE FOR REVIEW

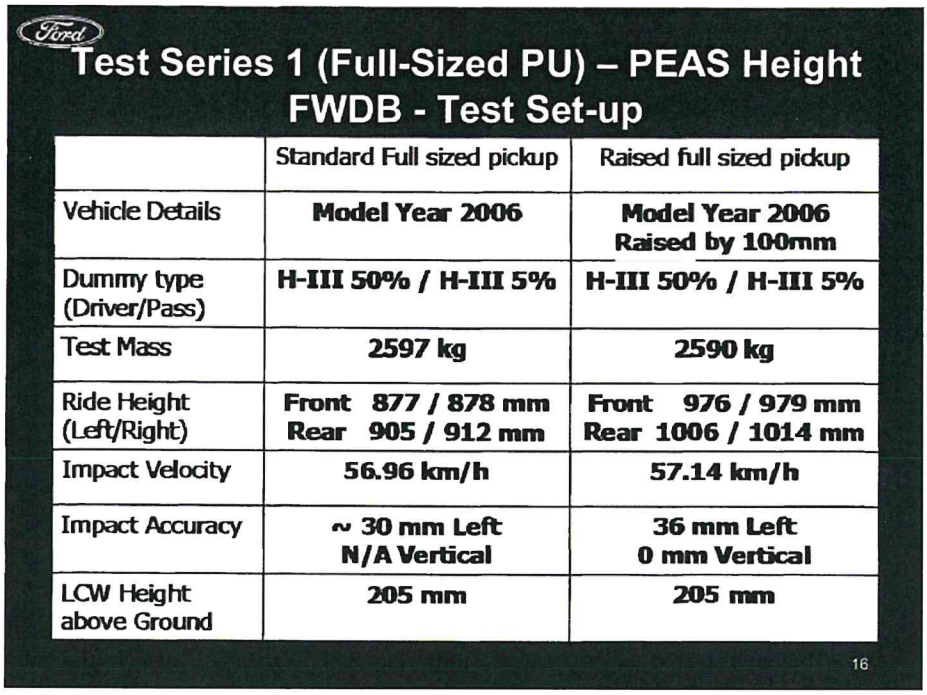
- Front to Front Compatibility Technical Working Group Report, October 2004 (Bates # 3720 176255 to 176273)
- NHTSA Compatibility Research Report, June 2005 (Bates # 3720 149876 to 149886)
- Vehicle to Vehicle Compatibility Meeting – Ford and NHTSA, February 2006 (Bates # 3720 147529 to 147562)
- Ford Presentation to NHTSA, December 2007 (Bates # 3720 22193 to 22263)
- Front to Front Compatibility Progress Report, December 2005 (Bates # 3720 17596 to 19598)
- EVC Ford Compliance Submissions (Bates # 3720 25817 to 25878)
- Vehicle to Vehicle Compatibility Assessment, Paper 07-0348 (Bates # 3720 37407 to 37422)
- EVC Progress Report, December 2003 (Bates # 3720 140655 to 140665)
- Research and Development Discussions with NHTSA, April 2006 (Bates # 3720 140667 to 140812)
- Vehicle to Vehicle Technical Working Group Research, Paper 05-463 (Bates # 3720 157328 to 157346)
- SAE Paper 2005-01-1373 (Bates # 3720 157483 to 157496)
- SAE Paper 2005-01-1355 (Bates # 3720 157540 to 157551)

C. ADDITIONAL ANALYSIS – VEHICLE RIDE HEIGHT

Ford performed a number of vehicle crash tests as part of their research into vehicle compatibility for the Technical Working Group who were developing the EVC. The objective of some of these tests was to determine whether geometrical alignment could be detected by dynamic crash testing. Ford performed

two series of tests, the first involved crashing pickup trucks into a fixed wall rigid barrier and the second involved crashing pickup trucks into passenger cars.

Image 1 summarizes the first test configuration with two full-sized pickup trucks both crashed into a full width rigid barrier at about 35mph. The significant difference between the two tests is that one of the pickup's ride height was increased by about 100mm (about 3.9") and the other pickup was tested with an unmodified ride height.



	Standard Full sized pickup	Raised full sized pickup
Vehicle Details	Model Year 2006	Model Year 2006 Raised by 100mm
Dummy type (Driver/Pass)	H-III 50% / H-III 5%	H-III 50% / H-III 5%
Test Mass	2597 kg	2590 kg
Ride Height (Left/Right)	Front 877 / 878 mm Rear 905 / 912 mm	Front 976 / 979 mm Rear 1006 / 1014 mm
Impact Velocity	56.96 km/h	57.14 km/h
Impact Accuracy	~ 30 mm Left N/A Vertical	36 mm Left 0 mm Vertical
LCW Height above Ground	205 mm	205 mm

Image 1: Pickup Truck Rigid Wall Tests

Image 2 compares the loads recorded in the rigid walls from the two tests. The walls have load cells that record the forces imparted by the vehicle during the event. The load cells were arranged in 10 rows with the lowest one 80mm (about 3.2") above ground. Each row was 200mm (about 7.9") high. Rows three and four are at a height that includes the Part 581 bumper zone (16 to 20" above ground).

The test results indicated that with the pickup truck ride height increased, the force on the wall also increased in height, with much greater force applied to row four than row three compared with the baseline test. So, the tests show that there was a direct correlation between ride height increase and the force application height increase. These results indicate the height and magnitude of the force applied by the truck to the object being struck. So, it is relevant for a pickup truck striking the front *or* back of another vehicle, given that Part 581 stipulates an identical bumper height at the front or rear of a passenger car.

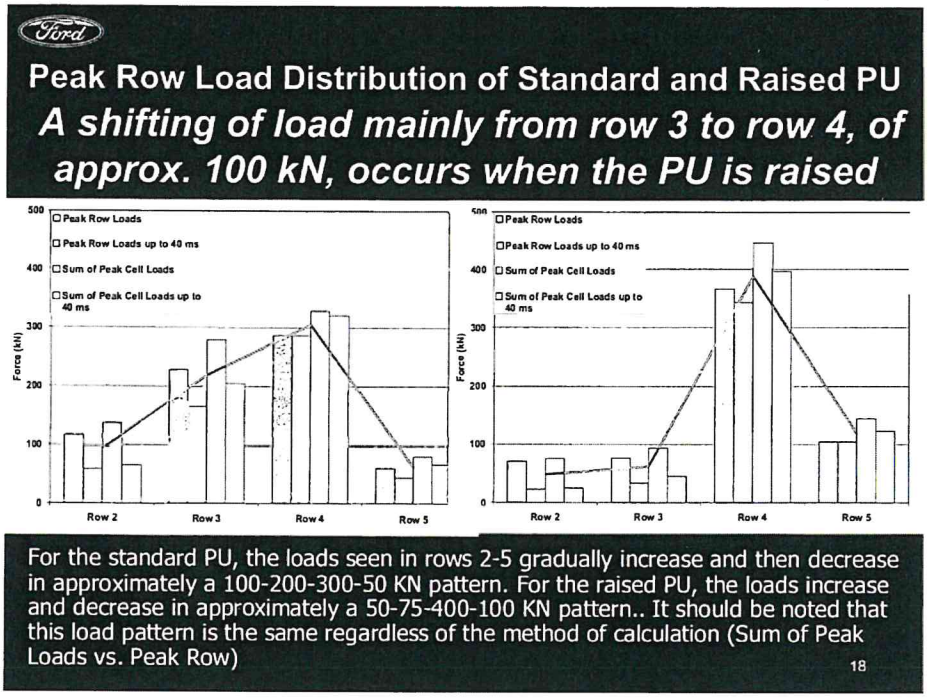


Image 2: Rigid Wall Force Comparison

The second series of tests involved crashing full-sized pickup trucks into passenger cars with a closing speed of about 52mph. Image 3 shows the test configurations. Again, two tests were conducted, one with the standard pickup truck ride height and the other with the pickup truck's ride height raised by 100mm (about 3.9"). In each test, anthropomorphic testing devices (ATDs) or instrumented dummies were installed to record the occupant injuries.

Image 4 shows a comparison of the structural engagement in the two tests with images depicting the vehicles' interactions during the crash events. The raised pickup truck overrides the passenger car's hood, with the truck's frame rail not getting significantly deformed or axially crushed. The front of the truck almost reaches the base of the car's windshield. Whereas in the standard pickup truck test, there was greater structural engagement with the car, the truck's frame rails were deformed, and the truck intruded less into the passenger car's front end.

The acceleration data collected from the two tests (Image 5) shows that the deceleration pulse was much greater earlier in the event (about 25G at 10ms), when there was structural interaction between the two vehicles, during the standard pickup truck ride height test. Whereas the deceleration pulse was about 2.5 times lower in the test with the raised ride height truck (about 10G at 10ms). This indicates poor structural interaction with the ride height raised and that the main energy absorbing members are not engaged and are not dissipating energy as the OEM intended. The consequence is greater decelerations later in the event (nearly 40G at about 80ms) that can be more detrimental to the vehicle's occupants.

Test Configuration for Full sized Pickup to Small Passenger Car Tests

	Test 1		Test 2	
	Full Sized Pickup	Small Passenger Car	Full Sized Pickup	Small Passenger Car
Vehicle Details	Model Year 2006	Model Year 2005	Model Year 2006 Raised by 100mm	Model Year 2005
Dummy type (Driver/Pass)	H-III 50% / H-III 50%	H-III 50% / H-III 5%	H-III 50% / H-III 50%	H-III 50% / H-III 5%
Test Mass	2598 kg	1297 kg	2604 kg	1300 kg
Ride Height (Left/Right)	Front 875 / 883 mm Rear 911 / 912 mm	Front 653 / 660 mm Rear 645 / 652 mm	Front 976 / 978 mm Rear 1019 / 1023 mm	Front 646 / 658 mm Rear 636 / 644 mm
Impact Velocity	28.0 km/h	56.4 km/h	27.8 km/h	56.5 km/h
Test accuracy	Car was 53 mm Right Vertical accuracy unknown		Car was 43 mm Right Vertical accuracy unknown	

21

Image 3: Pickup Truck and Passenger Car Crash Tests

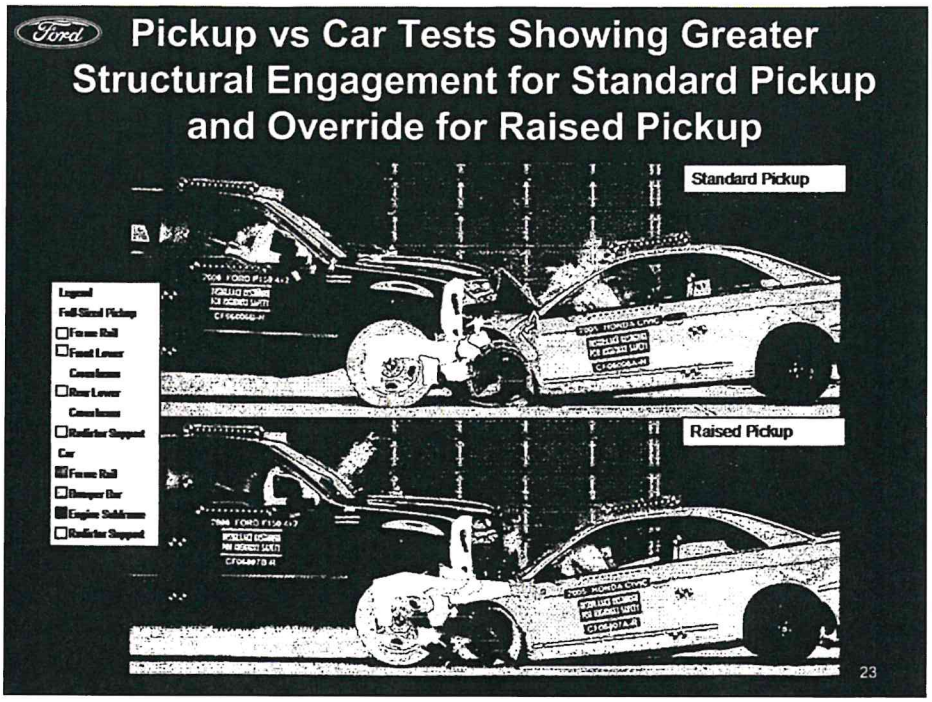


Image 4: Structural Engagement Comparison

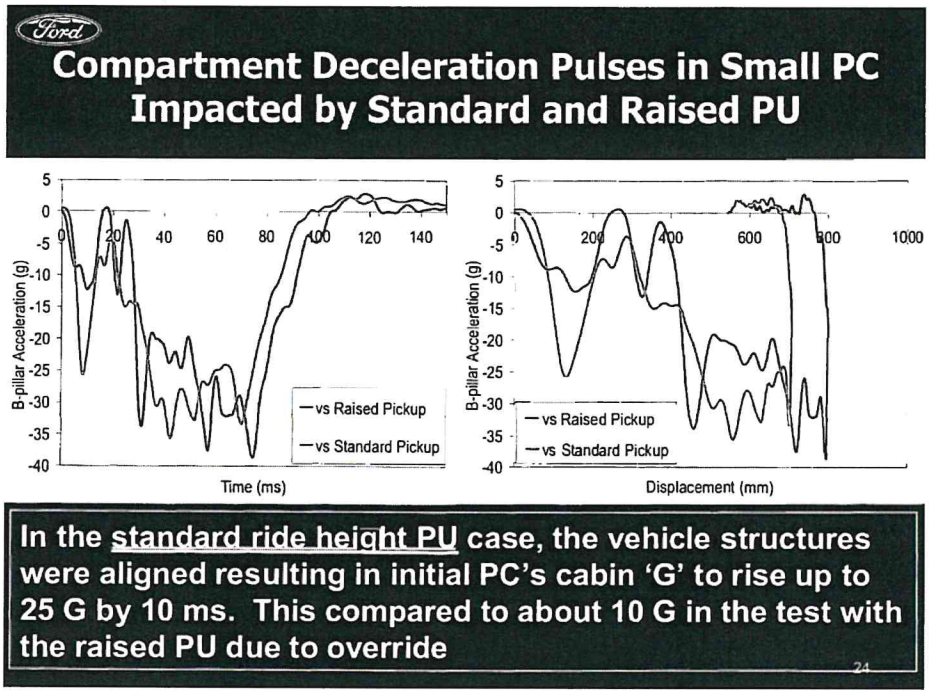


Image 5: Vehicle Acceleration Comparison

The Ford tests provide comprehensive data that shows that just by raising the ride height of a pickup truck (by less than 4" in this case), the compatibility of the vehicle is significantly degraded and so it represents a much greater danger to other vehicles in a crash. The ride height increase limits or prevents structural engagement between the vehicles and results in a significantly more severe crash for the passenger vehicle with increased intrusion levels into the car.

Although the focus of Ford's work was related to front-to-front vehicle compatibility, the rigid wall force data shows that the force application height increases with ride height and given that Part 581 applies to both the front and rear bumpers of passenger cars, the results are completely relevant for a front to rear crash event such as the Bryson's.

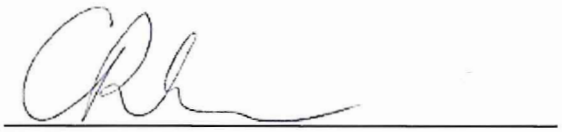
The majority of the TWG's work into the EVC was conducted in the period between 2003 and 2008. Multiple papers were generated by the researchers and presented in public forums or via SAE. Their test findings and recommendations to reduce the dangerous condition posed by LTVs through structural compatibility were widely available. Rough Country should have been aware of the risks posed by the ride height lift kit they produced for the Ford F-250 given the abundance of compatibility material available.

D. ADDITIONAL FINDINGS

Within the bounds of reasonable professional certainty, and subject to change if additional information becomes available, it is my professional opinion that:

1. The Ford tests provide comprehensive data that shows that just by raising the ride height of a pickup truck, the compatibility of the vehicle is significantly degraded and so it represents a much greater danger to other vehicles in a crash.

2. Rough Country should have been aware of the risks posed by the ride height lift kit they produced for the Ford F-250 given the abundance of compatibility material available.



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